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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/722,387

11/28/2003

Taizo Minowa

2003-1686A

7187

513 7590 02/06/2007  
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EXAMINER

PILKINGTON, JAMES

ART UNIT

PAPER NUMBER

3682

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/722,387		MINOWA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	James Pilkington		3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-7 and 9 is/are rejected.
- 7) ☐ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re clm 5, the use of the term "when" renders the claim unclear. The term "when" presumes an action to take place but no where previously in the claim is such action said to actually occur, or will occur. What structure allows for this function?

Re clm 7, the use of the word "substantially" renders the claim unclear. The term "substantially" is not defined in the specification in such a way that would allow one of ordinary skill in the art to understand how "substantially U-shaped" the joint must be to read on the claim.

Re clm 7, the use of the words "upper" and "lower" without providing a frame of reference from which upper and lower can be defined renders the claim unclear. What does the applicant mean by "a lower surface of an upper leg" and "an upper surface of a lower leg"? Is the applicant trying to say that the nails are formed on the inside surface of the intermediate joint as shown in Figures 3c' and 5? Or is applicant attempting to describe the device as it would look after the "when" of claim 1 occurs?

### ***Claim Rejections - 35 USC § 102***

Art Unit: 3682

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 5-7 and 9, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Isshiki, USP 5,218,592.

Re clm 5, Isshiki discloses a rack structure comprising:

- First and second toothed bars (81 and 82) connected by an intermediate joint (86b, 88b) of a soft resin material joining proximal ends of said first toothed bar and said second toothed bar, and having first and second nails (86a, 88a)

Re clm 6, said intermediate joint (86b, 88b) integrally connects the proximal ends of first and second toothed. Note: Integrally is defined by Webster's II New Riverside Dictionary as being arranged "essential for completeness," integral does not mean that it is formed as a single homogenous body.

Re clm 7, as best understood, the nails (86a, 88a) are formed on surfaces of the intermediate joint (86b, 88b).

Re clm 9, one of said first and second toothed bars (81 or 82) has hooks (89) on a side, the other bar (81 or 82) has holes (87), the bars are fastened together by inserting said hooks through the holes and the hooks are caught by edges of said holes (hole 87 has edges in which hooks 89 engage).

***Allowable Subject Matter***

Art Unit: 3682

5. Claim 8 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

6. Applicant's arguments filed 12/18/06 have been fully considered but they are not persuasive.

7. Applicant argues that Isshiki does not disclose two nails formed on the intermediate joint which contact each other so as to cause a restoring force when the first and second toothed bars are displaced.

In response the examiner argues that Isshiki does indeed disclose two nails formed on the intermediate joint, as disclosed above, these nails are capable of contacting each other to create a restoring force. The fact that Isshiki's "nails" are designed to hold a spring does not mean that the nails are not capable of coming in contact with each other. In order for a reference to anticipate a claim it must meet all the structural limitations of that claim, which Isshiki does, and it simple has to be "capable of" function in the same manner, which Isshiki can do.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection under 35 USC 112 presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Pilkington whose telephone number is (571) 272-5052. The examiner can normally be reached on Monday-Friday 8:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

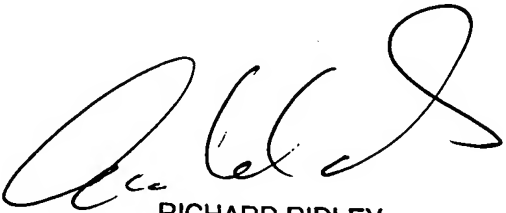
Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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RICHARD RIDLEY  
SUPERVISORY PATENT EXAMINER